

WORKSITE MODULE

- FOCUS:** Environmental change interventions that support employees' efforts to increase their fruit and vegetable intake.
- GOALS:** To encourage the worksites to provide fruit and vegetable food options whenever food is served at a company function, vending machines, at special occasion meals and for snacks, and in cafeterias.
- BACKGROUND:** A shift from "downstream" individual-level dietary behavior change interventions to more powerful "upstream" public policy and environmental interventions is the underlying concept of this year's 5 A Day Week Campaign.

The environmental change approach requires the full spectrum of interventions – from individual to environmental—for workers to achieve behavior change and *maintain* these changes. This spectrum also includes "midstream" approaches directed at defined populations, such as worksites. To be effective in improving eating behaviors, worksites should offer health promotion programs, involve mediation through organizational channels or natural environments, and implement macro-level interventions (i.e. policies, environmental change). The result of this comprehensive approach is an improvement not only in individual-level outcomes but also in broader outcomes as well – "an improvement in the quality of the organizational environment", whether and how many worksite cafeterias or vending machines expand their offerings of fruits and vegetables. ¹

The worksite materials presented below were adapted from the NCI R01 Research Grant Project at Dana Farber Cancer Institute, "Treatwell 5 A Day worksite nutrition intervention" (Principal Investigator: Glorian Sorensen, Ph.D., M.P.H.) ². A brief description of the grant project follows:

¹ Orleans CT. Promoting the Maintenance of Health Behavior Change: Recommendations for the Next Generation of Research and Practice. *Health Psychology* 2000; 19(1 Suppl):76-83.

² Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

"Treatwell 5 A Day worksite nutrition intervention" was a 5 A Day research study funded by the NCI to assess the effectiveness of worksite strategies in promoting workers' increased consumption of fruits and vegetables. The participating worksites included 22 Community Health Centers (CHC) in multiethnic neighborhoods in eastern Massachusetts. Worksites are an ideal channel for promoting change in large segments of the population. One reason is that they provide support for individual behavior change by altering the environment and social norms.

This study utilized strategies designed to influence organizational level change by adopting a catering policy to increase offerings of fruits and vegetables at meetings and functions, establishment of Employee Advisory Boards to work with the project's staff in tailoring the intervention to the needs of the site, and creating vending machine and break room programs. Another strategy included a family intervention designed to build a home environment supportive of workers' attempts to change eating habits. This strategy was found to be effective in raising fruit and vegetable intake among participating workers. The study results support the assumption that dietary habits occur in a social context, and show that dietary change intervention strategies can be enhanced when they take into account an individual's environment, including that at home and at work.

We've adapted only *one part* (focused on environmental change) of a comprehensive worksite strategy developed by this successful 5 A Day research study to facilitate your 5 A Day efforts with worksite wellness programs! Because of this, please keep in mind that the materials contained in this kit may not result in the level of dietary behavior change achieved in the Treatwell 5 A Day Research Study.

Feel free to adapt these materials to your local needs. IMPORTANT: Please cite appropriate credit to the Dana-Farber Cancer Institute, Grant Number: 5RO1CA59728, where noted.

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1. 5 A DAY GUIDE TO HEALTHY EATING AT WORK

(This guide focuses on the individual employee and may be used to supplement environmental change efforts at the worksite) ³

LUNCH . . . For many of us, lunch is the main break in our workday. We want to relax, enjoy good food, yet not be too full and tired for the rest of the day. Most of us have different ways of eating lunch over the course of a week. Sometimes we bring a bag lunch, other times we eat in a cafeteria or restaurant or eat fast food. Anyway you choose lunch, there's an easy way to add fruits or vegetables that you bring from home, or purchase at your worksite cafeteria or restaurant. Just see the suggestions listed below.

GOALS

- Have at least one serving of fruit or juice
- Have at least one serving of vegetable

Bag Lunch

- Bring vegetables to put on your sandwiches
- Add a piece of fruit to your lunch. Carry soft fruit in a plastic container to prevent squishing
- Have cut up vegetables instead of chips. Keep a container of vegetables ready to go on the top shelf of your refrigerator, or buy pre-cut vegetables
- Bring leftover salad or cooked vegetables to dress lightly with salad dressing

Cafeteria or Restaurant

- Have a bowl of vegetable or bean soup with your meal
- Pile up those vegetables at the salad bar
- Choose entrees with vegetables, like beef stew or stir-fried chicken and vegetables
- Ask if you can replace french fries or bread with a salad, tomato slices, or a vegetable side dish

Fast Food Restaurant

- Choose a restaurant that has a salad bar or serves other fruits and vegetables
- Ask for orange juice instead of soda pop
- Replace french fries with a baked potato, salad, corn on the cob, coleslaw, or beans
- Have some fruit or juice when you get back to work

³ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

No Lunch

- Have a piece of fruit from the deli or vending machine
- Drink some juice at your desk
- Bring some crunchy vegetables to eat while you work

Quick Tips

Add one or more of these to your sandwich and you'll have one more serving of fruit or vegetable! To avoid carrying a soggy sandwich, pack vegetables separately.

- Lettuce leaves or other salad greens
- Sliced tomatoes and onion
- Sliced cucumber or pepper rings
- Alfalfa or bean sprouts
- Sliced apple
- Cole slaw (try it with roast beef or turkey!)

Brown Bagging It⁴

Bringing your lunch to work can save you money! It can be easy to do and healthy, too. Here are a few brown bag items that are low in fat and/or high in 5 a Day. They're quick to fix and easy to take along to work. Just take a minute to plan ahead. Make your lunch the night before. Leave a note to remind yourself to take it to work the next day. Pack some of these quick and easy low-fat foods:

- o Dried fruit *
- o Fresh fruit *
- o Fig bars
- o Raw vegetables (try pre-cut, pre-washed ones) *
- o Sandwiches (don't forget the lettuce and tomato) *
- o Bagels
- o Bean burritos *
- o Low-fat crackers
- o 100% fruit juice (paper cartons or cans) *
- o Fruit salads (see recipe on this page) *
- o Applesauce cups *
- o Vegetable juice (cans) *
- o Canned fruit cups *
- o Rice cakes
- o Pretzels
- o Lettuce and vegetable salads *
- o Low-fat microwave popcorn
- o Dried fruit trail mix *
- o Hearty vegetable soup *

* 5 a Day Foods

⁴ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

2. ENLISTING MANAGEMENT and EMPLOYEE SUPPORT

- Worksites are an ideal setting for promoting dietary change since they support individual behavior change attempts by altering the environment and social norms in the workplace.
- Work with the organizational structure of the company to enlist support for your 5 A Day Week efforts. This will contribute to greater organizational “ownership” of the 5 A Day program, increased program participation, and greater likelihood of institutionalization after 5 A Day Week;
- Contact the CEO, President, or the highest manager at the worksite to enlist his or her support for 5 A Day Week (sample letter attached). Specifically, this serves as an invitation for leadership to
 - proclaim “5 A Day Week” at the worksite; and
 - endorse various environmental improvements, such as catering, cafeteria, and vending machine policies, which encourage increased availability of fruit and vegetables to your employees.
- Work with employee representatives to help plan, promote and deliver the worksite interventions. Such employees are trained to deliver health messages at project activities and promote activities among their co-workers. Their role is important in moving the projects forward and in representing the interests of all employees. In addition, have the worksite designate a worksite coordinator to serve as primary contact with the State 5 A Day Coordinator or key coalition partner.

--Sample letter to CEO, President, or Highest Manager at Worksite--

(Date)

Jim or Mary Smith
Chief Executive Officer
Company XYZ

RE: National 5 A Day Week – Worksite Health Promotion

Dear Mr. or Ms. Smith,

The National Cancer Institute is holding its National 5 A Day Week campaign, "Fruits and Vegetables: By Popular Demand", during September 10- 17, 2000. This seventh annual campaign will encourage consumers to request and obtain fruits and vegetables at their workplace cafeterias, vending machines, and catered events and provides worksite wellness coordinators and managers with the tools they need to increase the availability of fruits and vegetables to their employees.

The National Cancer Institute's continued support for eating "5 A Day" is derived from reviews of recent scientific research. The World Cancer Research Fund and the American Institute for Cancer Research found that diets containing substantial amounts of vegetables and fruits may prevent 20% or more of all causes of cancer. These findings stress the importance of promoting healthy lifestyle dietary practices across the nation. However, only 20% to 30% of Americans meet recommendations to consume 5 or more servings of fruits and vegetables per day. Worksites are an ideal setting for promoting dietary change since they support individual behavior change attempts by altering the environment and social norms in the workplace.

We invite you to support our efforts during 5 A Day Week this year by proclaiming "5 A Day Week" at your worksite and by endorsing various environmental improvements, such as catering, cafeteria, and vending machine policies, that encourage increased availability of fruit and vegetables to your employees.

If you would like any further information on the 5 A Day Program or the 5 A Day Week campaign, please feel free to contact (STATE COORDINATOR OR PARTNER)

_____ at (____) _____.

Sincerely Yours,

(signed)

Dr/Mr/Ms State Coordinator

3. CATERING GUIDELINES

Many worksites provide food for meetings and various social events. As a leader or intermediary in the 5 A Day Program, you could take on the role of encouraging local worksites to develop and follow 5 A Day Catering Guidelines. The ideas presented below were adapted from the RO1 5 A Day Research Grant project at Dana-Farber Cancer Institute, Boston, Massachusetts.⁵

Why have a catering guideline or policy?

- To encourage serving healthy food options at meetings and various social events,
- To promote the 5 A Day concept at worksites,
- To support employee efforts to adopt healthful eating habits,
- To improve employee health, which helps reduce health care costs.

What are the components of a catering policy?

- The goal of the catering policy is to improve the “quality”, in terms of healthier food choices, of the food served at the workplace. This includes food that is brought in for meetings and various social events (e.g. birthdays, holiday parties, awards ceremonies), and food that is prepared on site,
- Commit to serving at least one choice of fruit or vegetable with every catered meal,
- Where, possible, use the 5 A Day Recipe and Products Promotable Criteria in a manner that retains the integrity of fruits and vegetables as low-fat foods, increases consumer understanding of diet and health relationships, and helps employees develop skills to choose a nutritious diet that is consistent with the Dietary Guidelines for Americans.

⁵ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

Criteria for Products Promotable through the 5 A Day Program

1. All fruits and vegetables with the exception of avocados, coconuts, olives, and nuts. The program logo may be used to promote recipes with avocados, coconut, olives, or nuts as ingredients, if recipes meet the 5 A Day Recipe Criteria
2. All fresh, frozen, canned and dried fruits and (except avocados, coconut, olives, and nuts), provided that no fat or sugar have been added. Keep sodium content under 480 mg/FDA labeled serving size (8 oz) and FDA reference amount (240 ml).
3. All juice products that are 100% juice or juice concentrate, without added fat or sugar, and under 480 mg/FDA labeled serving size and FDA reference amount.
4. All promotions of fruits and vegetables done in association with the program must retain the nutrient integrity of fruits and vegetables as low-fat, lower calorie foods.

What is a Serving?

- A medium piece of fruit,
- 1/2 cup of raw or cooked fruit or vegetable,
- 1 cup of leafy salad greens,
- 1/4 cup of dried fruit,
- 6 ounces (3/4 cup) of juice or
- 1/2 cup cooked beans or peas (e.g., lentils, pinto beans, kidney beans).

Recipe Criteria

All recipes associated with the 5 A Day Program must meet these criteria:

1. 5 A Day recipes contribute at least one serving* of a fruit and/or a vegetable per portion of the recipe. Baked goods are allowed providing one serving contains a full 5 A Day serving of a fruit or vegetable, and meets the fat, saturated fat, cholesterol, and sodium criteria, as specified below.
2. 5 A Day recipes do not contain more than:
 - 30% of calories from fat or 3 g of total fat per 100 gram serving
 - 10% of calories from saturated fat or 1 gram of saturated fat per 100 grams
 - 100 milligrams of cholesterol
 - 480 milligrams of sodium per serving
3. Official 5 A Day recipes will be supplied by the Produce for Better Health Foundation or the National Cancer Institute. Otherwise, your recipes can be analyzed and approval can be obtained for a nominal fee by sending the recipes to the Produce for Better Health Foundation, 5301 Limestone Road, Suite 101; Wilmington, DE 19808-1249. Phone: 302/235-ADAY; FAX: 302/235-5555. Website: www.5aday.com.

The 5 A Day Recipe Criteria are based on the National Academy of Sciences Report Diet and Health: Implications for Reducing Chronic Disease Risk (1989) and the Dietary Guidelines for Americans (1990).

How should the policy be implemented?

1. Start small, then expand to other programs, divisions, and to other branches of the company or organization.

For example, your colleagues may be bringing cakes and other sweets to birthday celebrations in the office. You may wish to create an office policy to hold a potluck fruit party instead, where each employee brings in one fruit or fruit dish. Low-fat baked goods with a full serving of fruit or vegetable per portion count!

2. Once a small-scale policy is well-received, approach the program or division director to institute the policy program or division-wide.
3. Provide incentives, as incentives increase participation, motivate people to achieve individual and organizational goals. Find out what appeals to your employees and build an incentive program around these ideas. Incentives can even be offered on a limited budget. Contact local businesses. Many donate products at cost or free in exchange for public relations exposure to your employees (*source: Michigan's "Take the 5 A Day Challenge at Work. Worksite Wellness Nutrition Education Kit"*).

Visit our national industry partner's, Produce for Better Health Foundation, website for more information and an on-line catalogue of 5 A Day promotional materials (www.5aday.org).

SAMPLE CATERING POLICY⁶

[COMPANY NAME] is dedicated to providing a work environment that supports employee and workplace health. There is a general consensus among scientists that certain dietary factors are associated with the prevention of chronic diseases such as heart disease and cancer. In light of this consensus, [COMPANY NAME] believes that through food service offered on the premises, it is important to provide employees with healthy food choices that support their efforts to prevent disease and attain optimum health.

Therefore, [COMPANY NAME] will provide fruit and vegetable food choices that are low in fat at company meetings and functions. At functions which offer a selective menu or buffet, one or more healthful entrees, side dishes or desserts will be served [OPTION: only healthful foods will be served]. When non-selective menu is served, healthful selections will be offered [OPTION: only healthful snacks will be offered].

The attached 5 A Day Recipe and Products Promotable Criteria and the Food Service Guidelines for Healthy Menu Items can be used in menu planning. Please contact your [WORKSITE WELLNESS COORDINATOR or STATE 5 A DAY COORDINATOR, include name and phone number] for further assistance.

⁶ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

4. CAFETERIA INTERVENTION

See the "Tool for Food Service Personnel"

5. VENDING MACHINE INTERVENTIONS

Tools You Need:

- Block of time to embark on this time-consuming effort
- appropriate timeline that coincides with the contract renewal with vending machine companies; and
- Dedication towards investing your efforts to make small, but significant changes in the worksite environment!

Strategy for implementing vending machine interventions:

Our suggested strategy is adapted from the Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number: 3RO1CA59728 and is presented on the subsequent pages. Please feel free to modify your intervention as needed, but cite the Dana-Farber Grant where appropriate.⁷

CASE STUDY:

Pricing Strategy to Promote Low-Fat Vending Options

This study explored the effect of environmental strategies that influenced pricing and availability on food choices. The role of price on purchases of low-fat snacks from vending machines was examined by monitoring the sales of low-fat and regular snacks in vending machines during baseline, 3-week intervention period, in which prices of low-fat snacks were cut by 50%, and 3 weeks post-intervention. The results indicated that:

- The proportion of low-fat snacks purchased was 26%, 46%, and 23%, for the 3 periods, respectively, and were associated with significant increases sales of low-fat snacks;
- Average profits per machine and snack sales from school food service areas were not affected by intervention;
- Promotional signage was weakly associated with increased sales of low-fat snacks.

Conclusions:

- Relative price reduction may be effective in promoting lower-fat food choices in the population;
- Vending machines may be a feasible method for implementing such nutrition interventions.

⁷ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

French SA; Jeffery RW, Story M; Hannan P; Snyder MP. A pricing strategy to promote low-fat snack choices through vending machines. Am J Public Health 1997 May;87(5):849-51.

VENDING MACHINE INTERVENTIONS⁸

Five Step Strategy:

- STEP 1** I identify employee representative working on the project to assess need and interest in change of vending machine offerings;
- STEP 2** Conduct a “Vending Machine Survey” (attached) of employees to determine their interest in having healthful foods as options in their vending machines. I identify preferences for vending machine items;
- STEP 3** I identify worksite staff who deal(s) with vending companies. I identify date for vending machine contract renewal – schedule your plans to initiate your work with vending machine companies several months in advance of this period.
- STEP 4** Contact vendor representative to:
- explain the 5 A Day Week campaign effort (i.e. focus on environmental changes at work to facilitate dietary change); offer program guidelines;
 - share the results of the survey that support employees’ desire for healthful foods to obtain support from the vendor;
 - provide the vending company with suggestions for healthful food choices and determine which could be included.
 - seek permission from vendor to label appropriate fruit and vegetable products on the vending machine;
- STEP 5** Recruit employee representatives to publicize and promote the healthful changes in vending options:
- Post signs (or 5 A Day posters; call 1-800-4 CANCER for free copies; shipping costs apply for quantities above 20 items) near vending machines encouraging their purchase; place labels on the vending machines that indicate healthful choices and provide nutrition education
 - Continue to publicize the offerings and monitor and maintain labels and signs and track sales of healthful food items (by administering “Vending Machine Company Representative Interview”, attached);

⁸ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

**VENDING MACHINE SURVEY
For Employees⁹**

Do you use the vending machines? () YES () NO

IF NO, why not? (Please check all the apply)

- () I don't drink juice.
- () I don't drink soda.
- () The beverages are too expensive.
- () I bring my own beverage(s).
- () I buy beverages elsewhere.
- () Other reason (please explain) _____

IF YES, would you like to see more, less, or the same number of the following beverages:

| | | | |
|--------------|----------|----------|-----------------|
| Diet Coke | ___ More | ___ Less | ___ Same Number |
| Pepsi | ___ More | ___ Less | ___ Same Number |
| Diet Pepsi | ___ More | ___ Less | ___ Same Number |
| Seltzer | ___ More | ___ Less | ___ Same Number |
| Orange Juice | ___ More | ___ Less | ___ Same Number |
| Apple Juice | ___ More | ___ Less | ___ Same Number |

Are there any other juices or sodas that you would like to see in the vending machine?

Are you more likely to buy soda than juice now because sodas are cheaper?

() YES () NO

Please place this questionnaire in the survey box in the mailroom when you have finished.

Thank you very much for your helpful feedback!

⁹ Treatwell 5 A Day, Dana Farber Cancer Institute, Glorian Sorensen, PhD, MPH, Principal Investigator. NCI Grant Number:3RO1CA59728

VENDING MACHINE COMPANY REPRESENTATIVE INTERVIEW

(for Evaluation Purposes only)¹⁰

Vending Machine Co. Name: _____

1. Interview Date ____/____/____ 2. Interviewer ID _____

3. Worksite Rep. _____ 4. Title _____

5. Phone No. (____) _____

6. Worksite Name _____ 7. Worksite ID ____-____-____

8. Company Name _____ 9. Company ID ____-____-____

SAMPLE INTRODUCTION

Hello, my name is _____. I am calling from _____
 _____ We will be working with _____
 on a health promotion project.

_____ (PERSONNEL DIRECTOR) gave me your name as the contact person for the vending machines in this company. I would like to ask you some questions about what is sold in your vending machines, and about and recent changes in the foods served.

| | FOOD ITEM | Yes | No | DK |
|-----|---------------------------|-----|----|----|
| 11. | Cookies | 1 | 2 | 9 |
| 12. | Candy | 1 | 2 | 9 |
| 13. | Popcorn | 1 | 2 | 9 |
| 11. | Pretzels | 1 | 2 | 9 |
| 12. | Potato or corn chips | 1 | 2 | 9 |
| 13. | Regular Soda | 1 | 2 | 9 |
| 11. | Diet Soda | 1 | 2 | 9 |
| 12. | Fruit juice | 1 | 2 | 9 |
| 13. | Fresh fruit | 1 | 2 | 9 |
| 11. | Whole milk | 1 | 2 | 9 |
| 12. | Low-fat or skim milk | 1 | 2 | 9 |
| 13. | Low-fat or non-fat yogurt | 1 | 2 | 9 |
| 11. | Bagels | 1 | 2 | 9 |
| 12. | Muffins | 1 | 2 | 9 |

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- I. In the past 12 months are you aware of any requests by employees that items be removed from vending machines?

_____ YES 1
SKIP TO Q45. No 2

- 44a. What items have you been asked to remove as a result of these requests?

- II. In the past 12 months have any items been removed from any vending machines in this worksite as a result of these requests?

_____ YES 1
SKIP TO Q46. NO 2

- 45a. What items have been removed?

- II. In the past 12 months, have nutrition labels or signs been placed on any of your vending machines?

_____ YES 1
SKIP TO ENDING NO 2

- 46a. Please describe the labels or signs.

These are all the questions I have. Thank you for your time and help!

6. PARTNERING WITH INDUSTRY

- Visit PBH's 5 A Day Website www.5aday.com and click on 5 a Day Week.
- Work with the fruit and vegetable industry to jointly promote their products by increasing awareness and availability of fruits and vegetables in and around the workplace.
- The various categories of this industry include: Food Producer Groups; Corporate Retailers; Local Retailers; and Restaurants/Eateries. Tap the ones currently on your coalitions.
- In exchange for promotion of their products, ask them for sample products, services, and/or co-sponsorships.

ABOUT

MEDIA

INDUSTRY

*Visit the Produce for Better Health Foundation 5 A Day Week website:
www.5aday.com*

FOODSERVICE

A Tool for Food Service Personnel